We make your engine run
Over 15 years of experience in remote controls has allowed Mobile Control Systems to develop a large range of programmable electronic throttle controls for industrial diesel as well as CNG engines, electric motors and hybrid drive vehicles.

Approved by almost all of the most popular industrial engine manufacturers, thanks to its state of the art technology, MCS has rapidly become a preferred supplier to many construction-, mining-, handling- and agricultural equipment manufacturers, as well as to bus & coach and military vehicle manufacturers.

A young dynamic engineering team with quick response times, a skilled sales staff, and the capacity to customize our products in order to match your requirements are the fundamental reasons why the Company has shown such a rapid growth.

Come and look around at www.mcs-electronic-throttle-control.com, select the products which best fit your application, call us, and we’ll make it run for you!
Hall effect heavy duty suspended throttle pedals

Agricultural type suspended throttle pedal 967 000 series

Under-floor mounted throttle pedal 967 000 series

Polyamide throttle pedals 963 000 series

Pedal with swivel arm

CAN pedal modules

963 000 with CAN module

For complete product specification, go to: www.mcs-belgium.com
Hall effect heavy duty floor mounted throttle pedals

Aluminium throttle pedals 962 000 series

- Pedal with swivel arm
- Customized mounting plate
- Pedal with twin sensor
- Pedal with rubber cover

Polyamide throttle pedals 965 000 series

- Different treadle plates available
- 30°, 35° or 45°
Ergonomic polyamide throttle pedals 966 000 series

Different treadle plates available
33°, 39° or 45°

CAN pedal modules

For complete product specification, go to: www.mcs-belgium.com
Programmable Analogue Signal + Idle Validation Switch (IVS)

Switch High to Low

Switch Low to High

Idle-Low and Idle-High

Programmable 200-500 Hz PWM Signal + Idle Validation Switch (IVS)

Switch Low to High

Switch High to Low

Programmable Single/Dual Analogue Signals or 200-500Hz Single/Dual PWM Signals

2 Increasing Signals

2 Crossed Signals

2 Decreasing Signals
Programmable Analogue Signal + 200-500 Hz PWM Signal

4-20 mA Current Output Signals

Single 4-20mA Signal

Single 4-20mA + Single Analogue

CAN J1939 Data

CAN open Data

For your application, go to: www.mcs-belgium.com
**CAN throttle controls**

**Why:**
- Easy connection to vehicles equipped with a CAN bus network
- Multiple signals in two wires
- Quality and reliability of the CAN communication standard
- Possibility to program new parameters (dynamic network management)

**Description:**
- All MCS controls can be provided with the CAN module
- Flexibility to adjust settings and parameters according to standards or customer-specific applications.
- CAN control continuous self-test with possibility to activate a report transmission such as diagnostic message or error register.
- Customizing of wire type and length as well as connectors
- Several protocols available such as: ISO11898, J1939, CANopen, ISO11783

![Diagram of CAN throttle controls](image-url)
### Programmable electronic implement and hydrostatic drive controls

Narrow or Wide Dual Acting Pedal - Single sensor

964 000 series

CAN J1939 pedal modules

<table>
<thead>
<tr>
<th>Voltage [V]</th>
<th>Duty Cycle [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1</td>
<td>1</td>
</tr>
<tr>
<td>V2</td>
<td>2</td>
</tr>
<tr>
<td>V3</td>
<td>3</td>
</tr>
<tr>
<td>V4</td>
<td>4</td>
</tr>
<tr>
<td>V5</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Travel Angle [°]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral 0°</td>
</tr>
<tr>
<td>Full Forward +15°</td>
</tr>
<tr>
<td>Full Backward +15°</td>
</tr>
</tbody>
</table>

**Sensor 1**

- Voltage [V] 
- Duty Cycle [%] 
- Pull-Up 

**Sensor 2**

- Voltage [V] 
- Duty Cycle [%] 
- Pull-Up

For your application, go to: www.mcs-belgium.com
Hall effect heavy duty hand throttles

975 000 series - Side mounted

972 000 series - Top mounted

CAN hand throttle modules

with straight lever

975 000 with CAN module

with inclined lever
Hall effect direct drive hand throttles

976 000 series

Bended lever

Different knobs available

Horizontal lever

977 000 series - Finger-tip hand throttle

976 000 with CAN module

977 000 with CAN module

CAN hand throttle modules

For complete product specification, go to: www.mcs-belgium.com
Hall effect heavy duty rotary throttles

973 000 series

978 000 series
Optional rotation settings available

CAN rotary throttle modules

973 000 with CAN module

978 000 with CAN module

Hall effect heavy duty throttle position sensors

974 000 series

CAN TPS modules

974 000 with CAN module

Input lever

Dual lever

Long lever
The engines we make run:

- Caterpillar
- Cummins
- Dachai
- Daedong
- Daewoo
- Daf
- Detroit Diesel
- Deutz
- Hatz
- Hino
- Hyundai
- Isuzu
- Iveco
- JCB
- John Deere
- Kubota
- Liebherr
- Lovol
- MAN
- Mercedes
- MTU
- Navistar
- Nissan
- Perkins
- Renault
- Scania
- Shanghai Diesel
- Sisu Diesel
- VM Motori
- Volvo
- Volkswagen
- Weichai
- Yanmar
- Yuchai

For the perfect match of our controls with your engine, go to: www.mcs-belgium.com
**Automatic Engine Cut Off Controller**

**980973 series**

**GO GREEN!**

Turns off the engine automatically whenever engine is idling unnecessarily

**Why:**

- Up to 20% fuel saving
- Kind to the environment (decreases your carbon footprint)
- Extends the life time of your equipment

**Description:**

- The controller is enabled once the engine has reached its normal operating temperature
- The controller monitors system critical functions such as engine RPM, transmission shifter position and implement control pilot pressure to ensure the machine is not being operated (= unnecessary idling time)
- The controller has an adjustable time-out pre-set according to application/customer requirement
- Audio and visual warnings inside the machine's cab alert the driver (if present) to the imminent engine cut-off
- Power supply +12V / +24V
- Fuel solenoid circuitry opened through forcibly guided contacts safety relay
- Safety: Performance Level C according to ISO13849 and certified E1 TEST (BGBau)

[Diagram of the controller and its components]
Governor Electronic Control System

980975 series

Why:
- Manages vehicle's top speed
- Offers substantial cost saves by avoiding engine damage

Description (GECS-2, GECS-3):
- The MCS Governor Electronic Control System (GECS) has been developed to control the mechanical engine governor using Drive-by-Wire.
- The basic system is a kit which includes the throttle control pedal, the electronic module and the actuator.
- The electronic module is factory programmable and can be customised with several options.

Additional features (GECS-3 only):
- Inputs for additionnal sensors (temperature, pressure, exhaust gaz, ...)
- Remote control input
- Additional relay output

For your application, go to: www.mcs-belgium.com
Manufacturing facilities: Belgium, China, United States of America

Distributors and sales representatives: Australia, Canada, Denmark, Finland, France, Germany, India, Italy, New Zealand, Norway, Serbia, Singapore, South Africa, South Korea, Spain, Sweden, Ukraine, United States of America, United Kingdom, ...

For more information and product availability in your area, go to: www.mcs-belgium.com

Rue de Lusambo, 34A
B-1190 Brussels
BELGIUM

Tél. : +32-2-345.18.10
Fax : +32-2-343.94.23
info@mcs-belgium.com